

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International publication date  
14 July 2005 (14.07.2005)

PCT

(10) International publication number  
WO 2005/063516 A1

(51) International patent classification<sup>7</sup>: B60H 1/00, 1/34

[DE/DE]; Bleichstrasse 20, 71265 Weil der Stadt-Merklingen (DE).

(21) International application number: PCT/EP2004/013268

(22) International filing date: 23 November 2004 (23.11.2004)

(25) Language of filing: German

(26) Language of publication: German

(30) Data relating to the priority:  
103 61 108.8 22 December 2003 (22.12.2003) DE

(71) Applicant (for all designated States except US): BEHR GMBH & CO. KG; [DE/DE]; Mauserstrasse 3, 70469 Stuttgart (DE).

(74) Joint Representative: BEHR GMBH & CO. KG; Intellectual Property, G-IP, Mauserstrasse 3, 70469 Stuttgart (DE).

(81) Designated states (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(72) Inventor; and

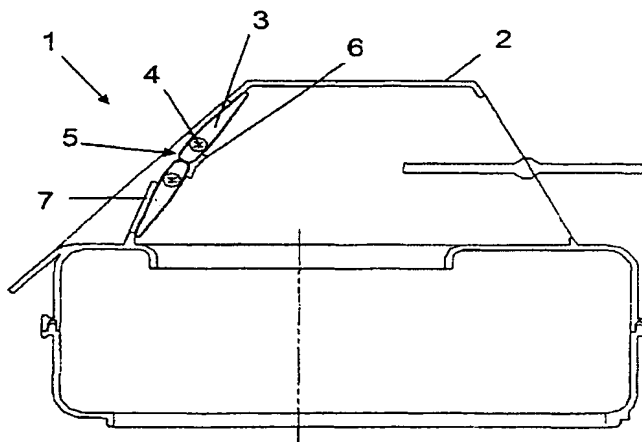
(75) Inventor/Applicant (US only): KOMOWSKI, Michael

[continued on next page]

As printed

(54) Title: AIR FLOW REGULATION DEVICE, ESPECIALLY FOR THE AIR CONDITIONING SYSTEM OF A MOTOR VEHICLE

(54) Bezeichnung: VORRICHTUNG ZUR LUFTMENGENREGELUNG, INSBESONDERE FÜR EINE KRAFTFAHRZEUG-KLIMAAANLAGE



(57) Abstract: The invention relates to an air flow regulation device comprising a housing and a flap arrangement (1) and to an air-conditioner comprising such an air flow regulation device. The flap arrangement (1) comprises at least two flap parts (3) for opening and closing an opening, which can be swiveled about swiveling axes (4) that extend in parallel. The two flap parts (3), in the closed state of the flap arrangement (1), rest on one another and roll off and/or slide on one another when at least one flap part is displaced from the closed state to a partially opened state or vice versa. The flap parts (3), at least in the area of their end sections (5) that rest on one another in the closed state, are elastic.

[continued on next page]

WO 2005/063516 A1

(84) **Designated states** (unless otherwise indicated, for every kind of regional protection available): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- With International Search Report.

*For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*

**Declaration according to Rule 4.17:**

- of inventorship (Rule 4.17(iv)) for the following designation US

---

(57) **Zusammenfassung:** Die Erfindung betrifft eine Vorrichtung zur Luftmengenregelung mit einem Gehäuse und einer einer Klappenanordnung (1) sowie ein Klimagerät mit einer Vorrichtung zur Luftmengenregelung, wobei die Klappenanordnung (1) mindestens zwei, um parallel zueinander verlaufende Schwenkachsen (4), verschwenkbare Klappenteile (3) zum Öffnen und Schließen einer Öffnung enthält, wobei die beiden Klappenteile (3) im geschlossenen Zustand der Klappenanordnung (1) aneinander anliegen und bei einer Bewegung zumindest eines Klappenteils vom geschlossenen Zustand in einen Zustand der teilweisen Öffnung oder umgekehrt, aneinander abrollen und/oder aneinander gleiten. Hierbei sind die Klappenteile (3) zumindest im Bereich ihrer im geschlossenen Zustand aneinander anliegenden Endbereiche (5) elastisch ausgebildet.